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a rotor magnet, said rotor magnet having:

a cylindrical shaped molded body of a mixture of magnetic powder of SmFeN and a resin binder, said molded body having at least one North pole and at least one South pole at alternating positions along a circumference of the molded body; and

a phosphate coating entirely covering an outside surface of the molded body, wherein said phosphate coating is an iron-hydrogenphosphate coating combined with an unstable Fe of the Fe component included in the body.

REMARKS

The status of the claims is as follows:

Claims amended : 26 and 28

Claims retained as is : none

Claims added : none

Claims cancelled : 27 and 29

Claims now in this

application : 26 and 28

Independent claims now in

this application (total 2) : 26, 28

Claims 26 and 28 are pending in the present application. The drawings are objected to for minor informalities. Claims 26-29 are objected to for minor informalities. Claims 26-29 are rejected under 35 U.S.C. §103(a) as obvious over Matsumura et al., U.S. Patent No. 4,088,909, Yamagami et al., JP 411283817A and Takahashi, U.S. Patent No. 5,728,232.

Objections to the Drawings

The Examiner objects to the drawings for not showing at least one North pole and at least one South Pole. Fig. 1 is amended to show at least one North pole and at least one South pole. No new matter is entered. Accordingly, it is respectfully requested that all objections to the drawings be withdrawn.

Objections to the Claims

The Examiner objects to claims 26-29 for reciting a “doughnut” shaped molded body. The Examiner makes this objection because the specification does not provided antecedent basis for “doughnut.” Rather, the specification provides antecedent basis for a “cylindrical” shaped body. Claims 26 and 28 are amended to recite a “cylindrical” body. Accordingly, it is respectfully requested that all objections to the claims be withdrawn.

Rejections Under 35 U.S.C. §103(a)

The Examiner rejects claims 26-29 as obvious over Matsumura et al., Yamagami et al., and Takahashi. Applicants respectfully traverse this rejection. Independent claims 26 and 28 recite that the phosphate coating is an iron-hydrogenphosphate coating combined with an unstable Fe of the Fe component included in the body. Not one of the three references teach or suggest this feature.

According to the present invention, since the phosphate coating is iron-hydrogenphosphate chemically combined with the unstable Fe of the Fe component in the body it is possible to provide a rotor magnet that has an excellent characteristic in corrosion resistance and adhering property. This feature results from the use of the unstable Fe of the Fe component included in the SmFeN magnet as part of the phosphate coating. That is, it is possible to reduce the unstable Fe which may cause rust or corrosion by using an unstable Fe as a combination factor.

Takahashi merely discloses that raw material for permanent magnets can have improved quality and stability against effects of atmospheric oxygen and humidity by forming a coating layer of aluminum phosphate on the surface, for which the pulverized raw material is mixed with aluminum phosphate and heated at 300 ° C to 500° C to provide the coating. Takahashi fails to teach or suggest the feature that the phosphate coating entirely covering the outside surface of the molded body is iron-

hydrogenphosphate made from the unstable Fe of the Fe component included in the SmFeN.

Accordingly, as the cited art fails to teach or suggest the present invention, it is respectfully requested that all rejections under 35 U.S.C. §103(a) be withdrawn.

In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited. Please charge any deficiency or credit any overpayment to Deposit Account No. 10-1250.

Respectfully submitted,
Jordan and Hamburg LLP

By Frank J. Jordan
Frank J. Jordan
Reg. No. 20,456
Attorney for Applicants

by and,

By Jacqueline M. Steady
Jacqueline M. Steady
Reg. No. 44,354
Attorney for Applicants

Jordan and Hamburg LLP
122 East 42nd Street
New York, New York 10168
(212) 986-2340

APPENDIX I**AMENDED CLAIMS WITH AMENDMENTS INDICATED THEREIN
BY BRACKETS AND UNDERLINING**

26. (Twice Amended) A rotor magnet comprising:

a [substantially doughnut] cylindrical shaped molded body of a mixture of magnetic powder of SmFeN and a resin binder, said molded body having at least one North pole and at least one South pole at alternating positions along a circumference of the molded body; and

a phosphate coating entirely covering an outside surface of the molded body,
wherein said phosphate coating is an iron-hydrogenphosphate coating combined with an unstable Fe of the Fe component included in the body.

28. (Amended) A motor comprising:

a stator; and

a rotor magnet, said rotor magnet having:

a [substantially doughnut] cylindrical shaped molded body of a mixture of magnetic powder of SmFeN and a resin binder, said molded body having at least one North pole and at least one South pole at alternating positions along a circumference of the molded body; and

a phosphate coating entirely covering an outside surface of the molded body, wherein said phosphate coating is an iron-hydrogenphosphate coating combined with an unstable Fe of the Fe component included in the body.